






# GBP-R Series

## Rack Type Lithium Iron Phosphate Battery

### Product introduction >>

This product is composed of high-quality lithium iron phosphate cells (by series and parallel) and advanced BMS management system. It can be used as an independent DC power supply or as a "basic unit" to form a variety of energy storage lithium battery power systems, with high reliability and longer life. It can be used as backup power supply of communication base station, backup power supply of digital center, household energy storage power supply, industrial energy storage power supply, etc. It can be seamlessly connected with main equipment such as UPS and photovoltaic power generation.

|   |  |  |
|---|--|--|
| <br>Small size and light weight  | <br>Screen direct selection of inverter communication | <br>Standard cycle life is more than 5000 times |
| <br>Multiple in parallel, easy for expand, Automatic addressing, no need to dial a code | <br>Easy for installation and maintenance           |  |



### Product parameters >>

| Model   | GBP                                   |         |             |             |             |         |             |             |             |           |
|---|---------------------------------------|---------|-------------|-------------|-------------|---------|-------------|-------------|-------------|-----------|
|   | 24-100R                               | 24-200R | 48-100R     | 48-200R     | 48-280R     | 48-314R | 51.2-100R   | 51.2-200R   | 51.2-280R   | 51.2-314R |
| Nominal Voltage (V)                             | 25.6                                  |         | 48          |             |             |         | 51.2        |             |             |           |
| Cell Specification                              | 100                                   | 100     | 100         | 100         | 280         | 314     | 100         | 100         | 280         | 314       |
| Nominal Capacity (Ah)                           | 100                                   | 200     | 100         | 200         | 280         | 314     | 100         | 200         | 280         | 314       |
| Nominal Energy (kWh)                            | 2.56                                  | 5.12    | 4.8         | 9.6         | 13.44       | 15.1    | 5.12        | 10.24       | 14.33       | 16.1      |
| Operating Voltage Range (V)                     | 22.4~29.2                             |         | 42~54.75    |             |             |         | 44.8~58.4   |             |             |           |
| Recommended Charging Voltage (V)                | 27.6                                  |         | 51.75       |             |             |         | 55.2        |             |             |           |
| Recommended Discharge Cut-off Voltage (V)       | 24                                    |         | 45          |             |             |         | 48          |             |             |           |
| Standard Charge/Discharge Current (A)           | 0.5C                                  |         |             |             |             |         |             |             |             |           |
| Maximum Continuous Charge/Discharge Current (A) | 1C (Customizable)                     |         |             |             |             |         |             |             |             |           |
| Allowable Humidity Range(%RH)                   | < 85                                  |         |             |             |             |         |             |             |             |           |
| Storage Temperature(°C)                         | -10 ~ 55(Recommend 10 ~ 35)           |         |             |             |             |         |             |             |             |           |
| Charging Temperature(°C)                        | 0~55                                  |         |             |             |             |         |             |             |             |           |
| Discharging Temperature(°C)                     | -10~55                                |         |             |             |             |         |             |             |             |           |
| Protection Level                                | IP20                                  |         |             |             |             |         |             |             |             |           |
| Cooling Method                                  | Natural Air Cooling / Intelligent Fan |         |             |             |             |         |             |             |             |           |
| Cycle Life                                      | 5000+Times at 80% DOD                 |         |             |             |             |         |             |             |             |           |
| Maximum Dimension (D*W*H)mm                     | 689*495*162                           |         | 689*495*162 | 682*510*246 | 904*465*252 |         | 689*495*162 | 682*510*246 | 904*465*252 |           |
| Weight(kg)                                      | 28                                    | 49      | 46          | 93          | 134         | 136     | 49          | 96          | 138         | 140       |






Note: The maximum charge/discharge rate of models GBP48-200R and BP51.2-200R can be customized to 1C. The above data is for reference only. In case of any changes, no further notice will be given.

# GBP-W Series

## Power Wall Type Lithium Ironphosphate Battery

### Product introduction >>

The product adopts modular design, higher integration, saves installation space; adopts high-performance lithium iron phosphate positive electrode material, the battery cell has good consistency, and the designed service life is more than 10 years; one-key switch machine, front operation, front wiring, easy installation, convenient maintenance and operation; various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection; strong compatibility, seamless connection with UPS, photovoltaic power generation and other main equipment; various forms of communication interfaces. CAN/RS485, etc. can be customized according to customer needs, which is convenient for remote monitoring and flexible use of the system. High-energy, low-power lithium-ion battery equipment achieves higher energy supply, lower energy consumption, and reduces environmental pollution; all-round, multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.

-  Wall-hanging installation, save space.
-  Multiple in parallel, easy for expand, Automatic addressing, no need to dial a code.
-  Standard configuration with LCD display, real time knowing battery status, Screen direct selection of inverter communication.
-  Environmentally friendly non-polluting materials, free of heavy metals, green and environmentally friendly.
-  Standard cycle life is more than 5000 times.



### Product parameters >>

| Model   | GBP24-100W                            | GBP24-200W | GBP48-100W | GBP48-200W  | GBP51.2-100W | GBP51.2-200W |
|---|---------------------------------------|------------|------------|-------------|--------------|--------------|
| Nominal Voltage (V)                             | 25.6                                  |            | 48         |             | 51.2         |              |
| Cell Specification                              | 100                                   | 100        | 100        | 100         | 100          | 100          |
| Nominal Capacity (Ah)                           | 100                                   | 200        | 100        | 200         | 100          | 200          |
| Nominal Energy (kWh)                            | 2.56                                  | 5.12       | 4.8        | 9.6         | 5.12         | 10.24        |
| Operating Voltage Range (V)                     | 22.4~29.2                             |            | 42~54.75   |             | 44.8~58.4    |              |
| Recommended Charging Voltage (V)                | 27.6                                  |            | 51.75      |             | 55.2         |              |
| Recommended Discharge Cut-off Voltage (V)       | 24                                    |            | 45         |             | 48           |              |
| Standard Charge/Discharge Current (A)           | 0.5C                                  |            |            |             |              |              |
| Maximum Continuous Charge/Discharge Current (A) | 1C (Customizable)                     |            |            |             |              |              |
| Allowable Humidity Range(%RH)                   | < 85                                  |            |            |             |              |              |
| Storage Temperature (°C)                        | -10 ~ 55(Recommended 10 ~ 35)         |            |            |             |              |              |
| Charging Temperature (°C)                       | 0~55                                  |            |            |             |              |              |
| Discharging Temperature (°C)                    | -10~55                                |            |            |             |              |              |
| Protection Level                                | IP20                                  |            |            |             |              |              |
| Cooling Method                                  | Natural Air Cooling / Intelligent Fan |            |            |             |              |              |
| Cycle Life                                      | 5000+ Times at 80% DOD                |            |            |             |              |              |
| Maximum Dimension (D*W*H)mm                     | 687*450*186                           |            |            | 682*465*276 | 687*450*186  | 682*465*276  |
| Weight(kg)                                      | 28                                    | 49         | 46         | 93          | 49           | 96           |






Note: The above data is for reference only. In case of any changes, no further notice will be given. For customization requirements such as Bluetooth function and 1C charge/discharge rate, please consult with the engineer.

# GBP-L Series

## Wheel Type Lifepo4 Batteries

### Product introduction >>

The product adopts wheel design, beautiful shape, and convenient movement; including the mainstream market inverter protocol, directly communicates; adopts a comprehensive and multi-level battery protection strategy and fault isolation measures to ensure the safe operation of the system. Widely used in small commercial and family energy storage.

-  Wheeled design, easy to move.
-  Embedded wiring, safe and reliable.
-  Standard configuration with LCD display screen, to understand battery status in real time, and directly select the inverter communication protocol on the screen.
-  Environmentally friendly and pollution-free materials, no heavy metals, green and environmentally friendly.
-  Standard cycle life over 5,000 times.



### Product parameters >>

| Model   | GBP48-280L                | GBP48-314L | GBP48-560L   | GBP48-628L | GBP51.2-280L | GBP51.2-314L | GBP51.2-560L | GBP51.2-628L |
|---|---------------------------|------------|--------------|------------|--------------|--------------|--------------|--------------|
| Nominal Voltage (V)                             | 48                        |            |              |            | 51.2         |              |              |              |
| Cell Specification                              | 280                       | 314        | 280          | 314        | 280          | 314          | 280          | 314          |
| Nominal Capacity (Ah)                           | 280                       | 314        | 560          | 628        | 280          | 314          | 560          | 628          |
| Operating Voltage Range (V)                     | 42~54.75                  |            |              |            | 44.8~58.4    |              |              |              |
| Recommended Charging Voltage (V)                | 51.75                     |            |              |            | 55.2         |              |              |              |
| Recommended Discharge Cut-off Voltage (V)       | 45                        |            |              |            | 48           |              |              |              |
| Standard Charge/Discharge Current (A)           | 100                       |            | 100          |            | 100          |              | 100          |              |
| Maximum Continuous Charge/Discharge Current (A) | 150                       |            | 200          |            | 150          |              | 200          |              |
| Allowable Humidity Range(%RH)                   | < 85                      |            |              |            |              |              |              |              |
| Storage Temperature (°C)                        | -10~55(Recommended 10~35) |            |              |            |              |              |              |              |
| Charging Temperature (°C)                       | 0~55                      |            |              |            |              |              |              |              |
| Discharging Temperature (°C)                    | -10~55                    |            |              |            |              |              |              |              |
| Protection Level                                | IP20                      |            |              |            |              |              |              |              |
| Cooling Method                                  | Natural Air Cooling       |            |              |            |              |              |              |              |
| Cycle Life                                      | 5000+ Times at 80% DOD    |            |              |            |              |              |              |              |
| Maximum Dimension (D*W*H)mm                     | 248*680*880               |            | 890*350*1060 |            | 248*680*880  |              | 890*350*1060 |              |
| Weight(kg)                                      | 137                       | 141        | 280          | 289        | 139          | 144          | 284/293      |              |






Note: The above data is for reference only. In case of any changes, no further notice will be given. For special customization requirements, please consult with the engineer.

# GBP-H/L Series

## Vertical / Wheel Type Lifepo4 Batteries

### Product introduction >>

The product adopts vertical / wheel type design, beautiful shape, and convenient movement; including the mainstream market inverter protocol, directly communicates; adopts a comprehensive and multi-level battery protection strategy and fault isolation measures to ensure the safe operation of the system. Widely used in small commercial and family energy storage.

-  Vertical / Wheel Type design, safe and stable.
-  Hidden wiring, beautiful design.
-  Standard LCD display screen, to understand battery status in real time, and directly select the inverter communication protocol on the screen.
-  Environmentally friendly and pollution-free materials, no heavy metals, green and environmentally friendly.
-  Standard cycle life over 5,000 times.



### Product parameters >>

| Model   | GBP48-280HL                   | GBP48-314HL | GBP51.2-280HL | GBP51.2-314HL |
|---|-------------------------------|-------------|---------------|---------------|
| Nominal Voltage (V)                             | 48                            |             | 51.2          |               |
| Cell Specification                              | 280                           | 314         | 280           | 314           |
| Nominal Capacity (Ah)                           | 280                           | 314         | 280           | 314           |
| Operating Voltage Range (V)                     | 42~54.75                      |             | 44.8~58.4     |               |
| Recommended Charging Voltage (V)                | 51.75                         |             | 55.2          |               |
| Recommended Discharge Cut-off Voltage (V)       | 45                            |             | 48            |               |
| Standard Charge/Discharge Current (A)           | 100                           |             |               |               |
| Maximum Continuous Charge/Discharge Current (A) | 150                           |             |               |               |
| Allowable Humidity Range(%RH)                   | < 85                          |             |               |               |
| Storage Temperature (°C)                        | -10 ~ 55(Recommended 10 ~ 35) |             |               |               |
| Charging Temperature (°C)                       | 0~55                          |             |               |               |
| Discharging Temperature (°C)                    | -10~55                        |             |               |               |
| Protection Level                                | IP20                          |             |               |               |
| Cooling Method                                  | Natural Air Cooling           |             |               |               |
| Cycle Life                                      | 5000+Times at 80% DOD         |             |               |               |
| Maximum Dimension (D*W*H)mm                     | 480*246*990                   |             |               |               |
| Weight(kg)                                      | 139                           | 143         | 141           | 145           |

Note: The above data is for reference only. In case of any changes, no further notice will be given. For special customization requirements, please consult with the engineer.

# BOC Series

## Low-voltage Lithium Nattery Outdoor Cabinet

### Product introduction >>

The BOC series battery products are applied across six major markets: power systems (urban and rural grid upgrades, etc.), new energy sector (photovoltaic grid connection, etc.), industrial sector (factory and mine power distribution), telecommunications industry (5G base station power supply), transportation (charging, high-speed rail power supply, etc.), and commercial & residential areas (commercial facilities and community power distribution).

Equipped with lithium iron phosphate (LiFePO4) battery cells and a customized BMS (Battery Management System) for effective cell management, these batteries offer superior performance, safety, and reliability compared to traditional batteries. With diverse communication interfaces and a comprehensive software protocol library, the battery systems can directly interface and communicate with mainstream inverters on the market.

- Excellent resistance to rain, dust, sunlight, and corrosion, with an IP54 protection rating.
- Equipped with multiple protection mechanisms, including overcurrent protection, overvoltage protection, short-circuit protection, and lightning protection.
- Modular design allows for free combination of solutions, with independent units that facilitate installation, maintenance, and upgrading.
- Small footprint, space-saving structure, and easy mobility, suitable for various installation scenarios.



### Lithium Battery Pack Parameter Sheet >>

| Model   | GBP48-100R                    | GBP48-200R  | GBP51.2-100R | GBP51.2-200R | GBP48-280R  | GBP48-314R | GBP51.2-280R | GBP51.2-314R |
|---|-------------------------------|-------------|--------------|--------------|-------------|------------|--------------|--------------|
| Cell Type (Ah)                                  | 100                           | 200         | 100          | 200          | 280         | 314        | 280          | 314          |
| Nominal Energy (kWh)                            | 4.8                           | 9.6         | 5.12         | 10.24        | 13.44       | 15.1       | 14.33        | 16.1         |
| Nominal Capacity (Ah)                           | 100                           | 200         | 100          | 200          | 280         | 314        | 280          | 314          |
| Nominal Voltage (VDC)                           | 48                            |             | 51.2         |              | 48          |            | 51.2         |              |
| Operating Voltage Range (VDC)                   | 42~54.75                      |             | 44.8~58.4    |              | 42~54.75    |            | 44.8~58.4    |              |
| Standard Charge/Discharge Current (A)           | 50                            | 100         | 50           | 100          | 100         |            |              |              |
| Maximum Continuous Charge/Discharge Current (A) | 100                           | 200         | 100          | 200          | 150         |            |              |              |
| Allowable Humidity Range (%RH)                  | < 85                          |             |              |              |             |            |              |              |
| Storage Temperature (°C)                        | -10 ~ 55(Recommended 10 ~ 35) |             |              |              |             |            |              |              |
| Charging Temperature (°C)                       | 0~55                          |             |              |              |             |            |              |              |
| Discharging Temperature (°C)                    | -10~55                        |             |              |              |             |            |              |              |
| Protection Level                                | IP20                          |             |              |              |             |            |              |              |
| Reference Weight (kg)                           | 46                            | 93          | 49           | 96           | 134         | 136        | 138          | 140          |
| Reference Dimensions (D*W*H)mm                  | 689*495*162                   | 682*510*246 | 689*495*162  | 682*510*246  | 904*465*252 |            |              |              |

Notes: For GBP48-100/200R and GBP51.2-100/200R, the standard charge/discharge current and maximum continuous charge/discharge current can be customized to 1C; the above are reference data, and if there are any changes, we will not notify you separately.

### Low-Voltage Lithium Battery Outdoor Cabinet Capacity Platform Parameter Table >>

| Model     | Dimensions D*W*H (mm) | Reference Weight (kg) | Reference Energy (kWh) |
|-----------|-----------------------|-----------------------|------------------------|
| BOC-5K-3  | 1016*715*1000         | 124                   | 15                     |
| BOC-5K-6  | 1016*715*1500         | 158                   | 30                     |
| BOC-5K-10 | 1016*715*2200         | 205                   | 50                     |
| BOC-10K-2 | 1016*715*1000         | 124                   | 20                     |
| BOC-10K-4 | 1016*715*1500         | 158                   | 40                     |
| BOC-10K-6 | 1016*715*2200         | 205                   | 60                     |
| BOC-15K-2 | 1226*715*1000         | 142                   | 32                     |
| BOC-15K-4 | 1226*715*1500         | 180                   | 64                     |
| BOC-15K-6 | 1226*715*2200         | 229                   | 96                     |

Notes: Including AC single-cooling air conditioner, fire protection, lighting, and battery busbar equipment; excluding batteries.

# GLV1 Series

## Low Voltage Stack System



### Product introduction >>

This product adopts stacked design, flexible expansion, beautiful shape; System one-button start, side hidden wiring is convenient for customers to use; Screen direct selection market mainstream inverter protocol, direct communication; Comprehensive and multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system, which is widely used in small commercial and home energy storage.

- Chinese and English display summary of all PACK information; Screen direct selection inverter communication protocol;
- Summary switch, to achieve a key switch;
- Stack design allows flexible battery expansion;
- Multiple clusters are parallel. A maximum of eight battery packs can be connected in parallel.



### Product parameters >>

| Model                                    | GLV1-P10                     | GLV1-P15    | GLV1-P20     | GLV2-P20     | GLV2-P30     | GLV2-P40     |
|--|------------------------------|-------------|--------------|--------------|--------------|--------------|
| Battery Module Model                     | LFP48V/100Ah                 |             |              | LFP48V/200Ah |              |              |
| Battery Module Nominal Energy(kWh)       | 4.8                          |             |              | 9.6          |              |              |
| Rated Voltage(V)                         | 48                           |             |              |              |              |              |
| Number of Cell Modules in Single Cluster | 2                            | 3           | 4            | 2            | 3            | 4            |
| Single Cluster Battery Energy (kWh)      | 9.6                          | 14.4        | 19.2         | 19.2         | 28.8         | 38.4         |
| Maximum number of clusters in parallel   | 8                            |             |              |              |              |              |
| Operating voltage range(V)               | 42~54.75                     |             |              |              |              |              |
| Recommended Charge Voltage(V)            | 51.75                        |             |              |              |              |              |
| Recommended discharge cut-off voltage(V) | 45                           |             |              |              |              |              |
| Maximum charge/discharge current(A)      | 0.5C                         |             |              |              |              |              |
| Unit cluster size (D*W*H)mm              | 425*700*672                  | 425*700*864 | 425*700*1056 | 479*700*848  | 479*700*1128 | 479*700*1408 |
| Unit cluster weight(kg)                  | 145                          | 199         | 254          | 228          | 324          | 420          |
| Communication mode                       | CAN/485/Bluetooth            |             |              |              |              |              |
| Storage temperature(°C)                  | -10 ~ 55(Recommended10 ~ 35) |             |              |              |              |              |
| Humidity(%RH)                            | < 85                         |             |              |              |              |              |
| Protection level                         | IP20                         |             |              |              |              |              |
| Cooling method                           | Natural Air Cooling          |             |              |              |              |              |
| Number of cycles                         | ≥5000                        |             |              |              |              |              |
| Standard of security                     | CE,UN38.3,MSDS               |             |              |              |              |              |

Note: The above data is subject to change without prior notice.

# GSL Series

## Wheel Type Pv & Battery Energy Storage Integrated Machine

### Product introduction >>

This series of products is a wheel type all-in-one machine that integrates hybrid inverters and energy storage batteries. Multiple application modes; Beautiful appearance, flexible mobility, and circular arc design are widely used in small commercial and home energy storage.



#### Multiple application modes

Three output modes;  
Four charging modes.



#### High Safety

DSP control, advanced control algorithm;  
Multiple security warnings and protection.



#### Intelligent and Friendly

Intelligent battery management system;  
Real time monitoring of APP cloud.



### Product parameters >>

| Model                                      | GSL48-3.5K-5kWh                                   |
|--|---|
| <b>Inverted Output</b>                     |   |
| Rated Output Power(W)                      | 3500  |
| Rated Output Power(VA)                     | 3500  |
| Maximum Peak Power(W)                      | 6000  |
| Rated AC Output                            | 230VAC(Can be set to 200/208/220/240VAC), 50/60Hz |
| Output Voltage Waveform                    | Pure sine wave                                    |
| Switching Time Between Inverter and Bypass | 10ms (Typical)                                    |
| Maximum Battery Inverter Efficiency        | 93%   |
| Overload Protection                        | 102%~110%, 5min; 110%~125%, 10s; >125%, 2s        |
| <b>Battery</b>                             |   |
| Capacity(kWh)                              | 100   |
| Rated Battery Voltage(VDC)                 | 48/51.2   |
| Battery Voltage Range(V)                   | 42~54.75/44.8~58.4                                |
| Maximum Mppt Charging Current(A)           | 50  |
| Maximum Mains Charging Current(A)          | 50  |
| Maximum Mixed Charging Current(A)          | 50  |
| <b>PV Charging</b>                         |   |
| Mppt Quantity                              | 1   |
| Maximum Photovoltaic Array Power(W)        | 5500  |
| Maximum Photovoltaic Input Current(A)      | 22  |
| Maximum Open Circuit Voltage(VDC)          | 500   |
| Mppt Scope Of Work(V)                      | 70~450  |
| Mppt Tracking Efficiency                   | 99.9%   |
| <b>Mains Input</b>                         |   |
| Input Voltage Range(VAC)                   | 90~280/170~280                                    |
| Frequency Range(Hz)                        | 50/60±0.3   |
| <b>Specifications</b>                      |   |
| Dimensions (D*W*H)mm                       | 210*500*805                                       |
| Weight (kg)                                | 70  |
| Waterproof Level                           | IP20  |
| Working Temperature Range(°C)              | -10~55  |
| Storage Temperature Range(°C)              | -10~55  |
| Noise(dB)                                  | <60   |
| Cooling Method                             | Forced air cooling                                |





Note: The above data is for reference and subject to change without prior notice. Special voltages can be customized.

# GSL Series

## Stacked Pv & Battery Energy Storage Integrated Machine

### Product introduction >>

This series of products is a stacked all-in-one machine that integrates a hybrid inverter and an energy storage battery. Multiple application modes, high power density, plug-and-play, hidden wiring design are widely used in small commercial and home energy storage.

|   |  |
|---|--|
|  <p><b>Multiple application modes</b><br/>Three output modes; Four charging modes.</p>                                 |  <p><b>Flexible combination method</b><br/>Stacked design;<br/>Battery pack capacity expansion on demand.</p>    |
|  <p><b>High security</b><br/>DSP control, advanced control algorithm;<br/>Multiple safety warnings and protection.</p> |  <p><b>Smart and friendly</b><br/>Intelligent battery management system;<br/>APP cloud real-time monitoring.</p> |



### Product parameters >>

| Model                               | GSL48   |              |              |             |              |
|-------------------------------------|---|--------------|--------------|-------------|--------------|
|                                     | 5.5K-10kWh  | 5.5K-20kWh   | 5.5K-30kWh   | 10K-10kWh   | 10K-20kWh    |
| <b>Inverted Output</b>              |   |              |              |             |              |
| Rated Output Power(W)               | 5500  |              | 10000        |             |              |
| Rated Output Powe(VA)               | 5500  |              | 10000        |             |              |
| Maximum Peak Power(W)               | 10000   |              | 15000        |             |              |
| Rated AC Output                     | 230VAC (Can be set 200/208/220/240VAC, 50/60Hz)                                   |              |              |             |              |
| Output Voltage Waveform             | Pure Sine Wave  |              |              |             |              |
| Inverter and Bypass Switching Time  | 10ms (typical)  |              |              |             |              |
| Maximum Battery Inverter Efficiency | 93%   |              |              |             |              |
| Overload Protection                 | 102%~110%, 5min; 110%~125%, 10s; >125%, 5s  |              |              |             |              |
| <b>Battery</b>                      |   |              |              |             |              |
| Energy Capacity(kWh)                | 10  | 20           | 30           | 10          | 20           |
| Battery Module Quantity             | 1   | 2            | 3            | 1           | 2            |
| Rated Battery Voltage(VDC)          | 48  |              |              |             |              |
| Battery Voltage Range(V)            | 42~54.75/44.8~58.4  |              |              |             |              |
| Rated Charge-Discharge Rate         | 0.5C  |              | 1C           |             |              |
| Max.MPPT Charging Current(A)        | 100   |              | 200          |             |              |
| Max.Mains Charging Current(A)       | 60  |              | 120          |             |              |
| Maxi.Hybrid Charging Current(A)     | 100   |              | 200          |             |              |
| <b>PV Charging</b>                  |   |              |              |             |              |
| MPPT Quantity                       | 1   |              | 2            |             |              |
| Max. PV Array Power(W)              | 5500  |              | 5500+5500    |             |              |
| Max. PV Input Current(A)            | 22  |              | 22+22        |             |              |
| Max. Open Circuit Voltage(VDC)      | 500   |              | 500+500      |             |              |
| MPPT Work Range(V)                  | 120~450   |              |              |             |              |
| MPPT Tracking Efficiency            | 99.9%   |              |              |             |              |
| <b>Mains Input</b>                  |   |              |              |             |              |
| Input Voltage Range(VAC)            | 90~280/170~280  |              |              |             |              |
| Frequency Range(Hz)                 | 50/60±0.3   |              |              |             |              |
| <b>Specifications</b>               |   |              |              |             |              |
| Dimensions(W*D*H)mm                 | 250*690*850   | 250*690*1310 | 250*690*1770 | 250*690*960 | 250*690*1420 |
| Weight(kg)                          | 125   | 225          | 325          | 128         | 228          |
| Classification of Waterproof        | IP20  |              |              |             |              |
| Operating Temperature Range(°C)     | -10~55  |              |              |             |              |
| Storage Temperature Range(°C)       | -25~60  |              |              |             |              |
| Noise(dB)                           | <60   |              |              |             |              |
| Heat Dissipation                    | Inverter forced air cooling (variable speed of fan) / Battery natural air cooling |              |              |             |              |

Note: The above data is for reference and subject to change without prior notice. Special voltages can be customized.

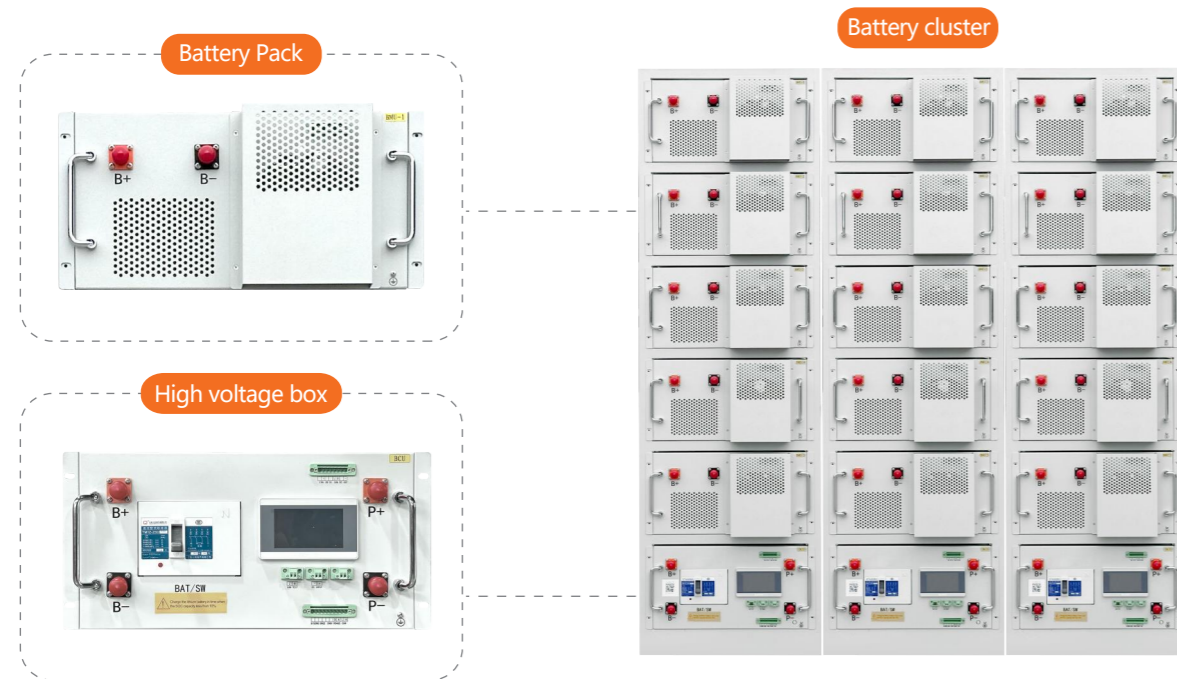
# GBP-H2 Series

## Lithium Battery Cluster Energy Storage System

### Product introduction >>

GBP-H2 series battery products are high-voltage and large-capacity systems developed for industrial and commercial emergency power supply, peak shaving and valley filling, and power supply in remote mountainous areas, islands and other areas without electricity or weak electricity. It uses lithium iron phosphate cells and a customized BMS system to effectively manage the cells. Compared with traditional batteries, it has better product performance and safety and reliability. Diversified communication interfaces and software protocol libraries enable the battery system to directly match and communicate with all mainstream inverters on the market. The product has many charge and discharge cycles, high power density, and a service life of more than 10 years. Unique designs and innovations have been made in compatibility, energy density, dynamic monitoring, safety, reliability, and product appearance, which can bring users a better energy storage application experience.

- Modular design, building-block construction, and automatic ID code recognition.
- Each cluster is equipped with an independent display screen to visually show the operation and alarm status.
- The communication forms are diverse, supporting various types such as TCP/IP, CAN, RS485, dry and wet contacts, etc.
- It is compatible with various types of equipment models currently available in the market, such as inverters, wind power controllers, and chargers.
- Support protocol customization.
- Optional remote DTU is available, which supports online remote upgrades.



### Product parameters >>

| Model                        | GBP96-100   | GBP48-200 | GBP38.4-280 | GBP38.4-314 |
|------------------------------|-------------|-----------|-------------|-------------|
| Cell Type (Ah)               | 100         |           | 280         | 314         |
| Nominal Energy (kWh)         | 9.6         |           | 10.7        | 12          |
| Nominal Capacity(Ah)         | 100         | 200       | 280         | 314         |
| Nominal Voltage(VDC)         | 96          | 48        | 38.4        |             |
| Operating Voltage Range(VDC) | 90~106.5    | 45~53.2   | 36~42.6     |             |
| Charging Temperature(°C)     | 0~55        |           |             |             |
| Discharging Temperature(°C)  | -10~55      |           |             |             |
| Protection Level             | IP20        |           |             |             |
| Reference Weight (kg)        | 87.8        |           | 86.5        | 94          |
| Reference Size(D*W*H)mm      | 684*510*245 |           |             |             |

Note: The battery pack is used with the system, the cycle life is  $\geq 5000$  working conditions, 25°C, 80%DOD; special voltage can be consulted and selected; the system with different voltage and capacity registration can be configured according to the battery pack specifications.

### Lithium battery cluster voltage platform parameter table >>

| Model          | Nominal voltage(V) | Nominal capacity(Ah) | Operating voltage range(VDC) | Recommended charge and discharge current (A) |
|----------------|--------------------|----------------------|------------------------------|--|
| GBP96-100/200  | 96                 | 100/200              | 90~106.5                     | 50/100                                       |
| GBP192-100/200 | 192                |                      | 180~213                      |  |
| GBP220-100/200 | 220.8/224          |                      | 207~245                      |  |
| GBP288-100/200 | 288                |                      | 270~319.5                    |  |
| GBP360-100/200 | 358.4              |                      | 336~400                      |  |
| GBP384-100/200 | 384                |                      | 360~426                      |  |
| GBP480-100/200 | 480                |                      | 450~532                      |  |
| GBP384-280/314 | 384                | 280/314              | 360~426                      | 140/150                                      |
| GBP460-280/314 | 460.8              |                      | 432~511                      |  |
| GBP538-280/314 | 537.6              |                      | 504~596                      |  |
| GBP576-280/314 | 576                |                      | 540~639                      |  |
| GBP652-280/314 | 652.8              |                      | 612~724                      |  |
| GBP692-280/314 | 691.2              |                      | 648~767                      |  |
| GBP768-280/314 | 768                |                      | 720~852                      |  |

Note: See attachment for detailed parameters, special voltage and capacity can be customized.

# GBP-PC Series

## Lithium Battery Cluster Energy Storage System

### Product introduction >>

GBP-PC series battery products are high-voltage and large-capacity systems developed for industrial and commercial emergency power supply, peak shaving and valley filling, and power supply in remote mountainous areas, islands and other areas without electricity or weak electricity. It uses lithium iron phosphate cells and a customized BMS system to effectively manage the cells. Compared with traditional batteries, it has better product performance and safety and reliability. Diversified communication interfaces and software protocol libraries enable the battery system to directly match and communicate with all mainstream inverters on the market. The product has many charge and discharge cycles, high power density, and a service life of more than 10 years. Unique designs and innovations have been made in compatibility, energy density, dynamic monitoring, safety, reliability, and product appearance, which can bring users a better energy storage application experience.

- Modular design and building block-style assembly, with automatic ID code recognition.
- Each cluster is equipped with an independent display screen, which intuitively shows the operation and alarm status.
- Supports multiple communication types such as TCP/IP, CAN, RS485, and dry/wet contacts.
- Compatible with various types of mainstream equipment on the market, including inverters, wind power controllers, and battery chargers.
- Supports protocol customization; optional remote DTU enables online remote upgrades.
- Removable battery rack to reduce transportation space.



### Product parameters >>

| Model                        | GBP51.2 314 |
|------------------------------|-------------|
| Cell Type (Ah)               | 314         |
| Nominal Energy (kWh)         | 16.1        |
| Nominal Capacity(Ah)         | 314         |
| Nominal Voltage(VDC)         | 51.2        |
| Operating Voltage Range(VDC) | 48~56.8     |
| Charging Temperature(°C)     | 0~55        |
| Discharging Temperature(°C)  | -10~55      |
| Protection Level             | IP20        |
| Reference Weight (kg)        | 128         |
| Reference Size(D*W*H)mm      | 904*510*245 |

Note: The battery pack is used with the system, the cycle life is  $\geq 5000$  working conditions, 25°C, 80%DOD; special voltage can be consulted and selected; the system with different voltage and capacity registration can be configured according to the battery pack specifications.

### Lithium battery cluster voltage platform parameter table >>

| Model    | Nominal Voltage(V) | Nominal Capacity(Ah) | Operating Voltage Range(VDC) | Recommended Charge and Discharge Current (A) |
|----------|--------------------|----------------------|------------------------------|--|
| GBP-PC2  | 102.4              | 314                  | 96~113.6                     | 150  |
| GBP-PC3  | 153.6              |                      | 144~170.4                    |  |
| GBP-PC4  | 204.8              |                      | 192~227.2                    |  |
| GBP-PC5  | 256                |                      | 240~284                      |  |
| GBP-PC6  | 307.2              |                      | 288~340.8                    |  |
| GBP-PC7  | 358.4              |                      | 336~397.6                    |  |
| GBP-PC8  | 409.6              |                      | 384~454.4                    |  |
| GBP-PC9  | 460.8              |                      | 432~511.2                    |  |
| GBP-PC10 | 512                |                      | 480~568                      |  |
| GBP-PC11 | 563.2              |                      | 528~624.8                    |  |
| GBP-PC12 | 614.4              |                      | 576~681.6                    |  |
| GBP-PC13 | 665.6              |                      | 624~738.4                    |  |
| GBP-PC14 | 716.8              |                      | 672~795.2                    |  |
| GBP-PC15 | 768                |                      | 720~852                      |  |
| GBP-PC16 | 819.2              |                      | 768~908.8                    |  |

Note: See attachment for detailed parameters, special voltage and capacity can be customized.

# GHV2-PC Series

## High-voltage Lithium Battery Stack System

### Product introduction >>

This product adopts a modular design, allowing free assembly according to needs. It features excellent cell performance and superior consistency, along with a long cycle life, which can better meet customer requirements. The unique stacking design eliminates wiring troubles, and the built-in high-quality battery intelligent management system ensures the reliability and safety of the battery. In addition, the battery output uses quick-plug connectors for easy customer operation. It has a wide voltage selection range and is equipped with external CAN and RS485 ports, which can be compatible with various mainstream brands of inverters on the market, providing greater compatibility and flexibility. A DTU can be optionally configured to facilitate customers' remote operation and battery status reading.

#### Long Life and Cost Reduction

- Charge - discharge conversion efficiency is 91%, and the system life is more than 6000 cycles;
- No - wiring design facilitates transportation and eliminates battery installation work.

#### Safe and Reliable

- High - performance battery management system and triple battery logic protection design;
- Remote DTU design enables remote monitoring of battery status and convenient reading and modification of parameters.

#### Efficient and Flexible

- Integrated design concept, featuring high efficiency and high energy density, reducing the floor area by 20%;
- Intelligent - level management reduces the battery bucket effect and increases the discharge capacity.



### General Parameters >>

| Model     | Number of Modules | Rated Voltage (V) | Operating Voltage (V) | Charging Voltage (V) | Size(W*D*H)mm |
|-----------|-------------------|-------------------|-----------------------|----------------------|---------------|
| GHV2-PC3  | 3                 | 153.6             | 144~170.4             | 165.6                | 480*890*1080  |
| GHV2-PC4  | 4                 | 204.8             | 192~227.2             | 220.8                | 480*890*1325  |
| GHV2-PC5  | 5                 | 256               | 240~284               | 276                  | 480*890*1570  |
| GHV2-PC6  | 6                 | 307.2             | 288~340.8             | 331.2                | 480*890*1815  |
| GHV2-PC7  | 7                 | 358.4             | 336~397.6             | 386.4                | 480*890*2060  |
| GHV2-PC8  | 8                 | 409.6             | 384~454.4             | 441.6                | 960*890*1405  |
| GHV2-PC9  | 9                 | 460.8             | 432~511.2             | 496.8                | 960*890*1405  |
| GHV2-PC10 | 10                | 512               | 480~568               | 552                  | 960*890*1650  |
| GHV2-PC11 | 11                | 563.2             | 528~624.8             | 607.2                | 960*890*1895  |
| GHV2-PC12 | 12                | 614.4             | 576~681.6             | 662.4                |               |
| GHV2-PC13 | 13                | 665.6             | 624~738.4             | 717.6                | 960*890*2140  |
| GHV2-PC14 | 14                | 716.8             | 672~795.2             | 772.8                |               |
| GHV2-PC15 | 15                | 768               | 720~852               | 828                  |               |

### System Parameters>>

|                                      |   |
|--------------------------------------|---|
| Battery Module                       | BAT-14.33(16S1P51.2V280Ah)                  |
| Maximum Charging Current (A)         | 140   |
| Maximum Discharging Current (A)      | 140   |
| Control Module                       | PDU-HV2                                     |
| Working temperature range(°C)        | Charging: 0 ~ 55°C; Discharging: -20 ~ 55°C |
| Working humidity range (%RH)         | 0~95% Without condensation                  |
| Heat-dissipating method              | Forced Air Cooling                          |
| Hybrid Inverter Communication Method | CAN/485                                     |
| EMS Communication Method             | TCP/IP                                      |

Note: The above data is subject to change without prior notice.

# GSS-PC Series

## Lithium Battery Outdoor Cabinet

### Product introduction >>

The battery outdoor cabinet is safe, reliable, intelligent, efficient and flexible to deploy. Through modular design and advanced management technology, it provides users with cost-effective energy storage solutions. From cell-level safety control to system-level intelligent scheduling, it fully meets the energy storage needs of different scenarios, and helps green energy transformation and intelligent upgrade of power systems. It adapts to a variety of hybrid inverter brands, fully adapts to support single-branch and two-branch inverters.

#### Strong environmental adaptability

- It has the characteristics of waterproof, dustproof, sun-proof, and corrosion-resistant. It can operate stably for a long time in high temperature, humid, dusty and other outdoor environments, protecting the battery from external erosion.

#### Safety protection design

- Fireproof materials or heat-insulating structures are usually used to reduce the risk of fire caused by battery overheating or short circuit; some products are equipped with anti-theft locks or intelligent monitoring systems to improve safety.

#### Modularity and scalability

- Supports flexible combination of multiple battery packs to meet different capacity requirements; reserved interfaces are convenient for later upgrades or connection to other devices (such as solar panels, inverters, etc.).

#### Saving space and flexible deployment

- Outdoor independent installation, no need to occupy indoor space; adaptable to diverse scenarios.



### General Parameters >>

| Model    | System Composition | Rated Voltage (V) | Operating Voltage (V) | Rated Energy (kWh) | Dimensions(D*W*H)mm | Weight(t) |
|----------|--------------------|-------------------|-----------------------|--------------------|---------------------|-----------|
| GSS-PC4  | 4pack              | 204.8             | 192~227.2             | 64.3               | 1300*750*1675       | 0.9       |
| GSS-PC5  | 5pack              | 256               | 240~284               | 80.4               | 1300*750*1930       | 1.0       |
| GSS-PC6  | 6pack              | 307.2             | 288~340.8             | 96.5               | 1300*750*2185       | 1.1       |
| GSS-PC7  | 7pack              | 358.4             | 336~397.6             | 112.5              | 1300*1183*1420      | 1.5       |
| GSS-PC8  | 8pack              | 409.6             | 384~454.4             | 128.6              | 1300*1183*1675      | 1.7       |
| GSS-PC9  | 9pack              | 460.8             | 432~511.2             | 144.7              |                     | 1.8       |
| GSS-PC10 | 10pack             | 512               | 480~568               | 160.8              | 1300*1183*1930      | 2.0       |
| GSS-PC11 | 11pack             | 563.2             | 528~624.8             | 176.8              |                     | 2.1       |
| GSS-PC12 | 12pack             | 614.4             | 576~681.6             | 192.9              | 1300*1183*2185      | 2.3       |
| GSS-PC13 | 13pack             | 665.6             | 624~738.4             | 209.0              |                     | 2.4       |
| GSS-PC14 | 14pack             | 716.8             | 672~795.2             | 225.1              | 1300*1183*2440      | 2.5       |
| GSS-PC15 | 15pack             | 768               | 720~852               | 241                |                     | 2.6       |

### System Parameters>>

| Cell Parameters                 | Cell Type                       | Lithium Iron Phosphate Cell      |
|---------------------------------|---------------------------------|----------------------------------|
|                                 | Cell Specification              | 3.2V314Ah                        |
| PACK Parameters                 | Combination Mode                | 16S1P                            |
|                                 | Rated Voltage (V)               | 51.2                             |
|                                 | Operating Voltage (V)           | 48~56.8                          |
|                                 | Rated Energy (kWh)              | 16                               |
|                                 | Standard Charge/Discharge Power | 0.5P                             |
| System Parameters               | Maximum Charge/Discharge Rate   | 0.5P                             |
| Protection & General Parameters | DC Overcurrent Protection       | Yes                              |
|                                 | DC Short - Circuit Protection   | Yes                              |
|                                 | DC Overvoltage Protection       | Yes                              |
|                                 | Over - temperature Protection   | Yes                              |
|                                 | Fire - fighting System          | Aerosol/Perfluoroketone Optional |
|                                 | Wiring Mode                     | Side - entry Wiring              |
|                                 | Ambient Temperature (°C)        | -20~50 (>45 requires derating)   |
|                                 | Charging Temperature (°C)       | 0~55                             |
|                                 | Discharging Temperature (°C)    | -10~55                           |
|                                 | Ambient Humidity (%RH)          | <95, No Condensation             |
|                                 | Operating Altitude (m)          | 5000 ( Derated use above 2000m)  |
|                                 | Protection Class                | IP54(Key Components IP65)        |
|                                 | Cooling Method                  | Industrial Air Conditioning      |

Note: Subject to the actual product. If there are any modifications to the parameters, we will not notify separately.

# GSO50-100P/GSO100-200P

## Out Door Cabinet-On Grid Machine Series

### Product introduction >>

The air cooling outdoor cabinet-on grid machine integrates energy storage batteries, PCS, EMS, air conditioning and fire protection systems. It is a product specially launched for the application needs of small industrial and commercial, hospital buildings, and household energy storage peak-shaving and valley-filling applications.

#### Product Features

- All in one, factory prefabricated design;
- Flexible deployment, plug and play;

#### Intelligent and friendly

- Programmable working mode, touch screen control;
- Linkage of local and cloud monitoring, rapid digital diagnosis, and intelligent automatic inspection;

#### Safe and efficient

- High efficient neutral point clamped;
- No parallel circulation, reduce energy loss significantly;
- 3S collaboration,EMS closed-loop safety logic,make sure system security;

#### Cost effective

- Multiple charging and discharging logic, support peak and valley arbitrage
- System comprehensive conversion efficiency  $\geq 90\%$



### Product parameters >>

| Model                                    | GSO50-100P   | GSO100-200P    |
|--|--|----------------|
| Rated Power(kW)                          | 50   | 100            |
| Maximum Output Power(kW)                 | 55   | 110            |
| Rated AC Voltage(V)                      | AC 400   |                |
| AC Voltage Range(V)                      | AC 380(-20%~+15%)  |                |
| Rated AC Frequency(Hz)                   | 50/60±2.5  |                |
| Power Factor                             | -0.99 ~ +0.99  |                |
| THDI                                     | ≤3%(Full load)   |                |
| Charging/Discharging Conversion Time(ms) | < 100  |                |
| Isolation Method                         | None isolation   |                |
| Connect Method                           | Three phase four wire  |                |
| Battery Configuration                    | 1P225S   | 1P210S         |
| Battery Cell Type                        | LFP 150Ah  | LFP 300Ah      |
| Nominal Voltage(V)                       | 720  | 672            |
| Operating Voltage(V)                     | 652.5~798.75   | 609~745.5      |
| Battery Capacity(kWh)                    | 108  | 201            |
| PCS Maximum Efficiency                   | ≥98%   |                |
| System Aximum Efficiency                 | > 90%  |                |
| Charging/Discharging Rate                | ≤0.5C  |                |
| AC Input                                 | Yes  |                |
| PCS AC Protection                        | Yes  |                |
| AC Output Protection                     | Yes  |                |
| Over Voltage Protection                  | Yes  |                |
| Fire Protection                          | Aerosol / Perfluoro  |                |
| Dimension(D*W*H)                         | 1200*1100*2200   | 1200*1600*2200 |
| Weight(t)                                | 1.8  | 2.6            |
| Incoming Line Method                     | Side connection(Bottom connection can be customized)                                   |                |
| Operating Temperature Range(°C)          | -20~50(De-rating power from 45)  |                |
| Temperature Humidity(%RH)                | ≤95%, Non-condensing   |                |
| Work Altitude(m)                         | ≤3000(De-rating power from 2000)   |                |
| IP Grade                                 | IP54(Key Device IP65)  |                |
| Cooling Method                           | Industrial air Conditioning(for battery )/Forced air cooling(for electrical equipment) |                |
| Communication Interfaces                 | RS485/Etherne  |                |
| Communication Rules                      | RTU/MODBUS-TCP   |                |

Note: The above data is for reference only and is subject to change without prior notice.

# GSO50-100/GSO125-245

## Out Door Cabinet-On/off Grid Machine Series

### Product introduction >>

The air cooling outdoor cabinet-on/off grid machine integrates energy storage batteries, PCS, EMS, DCDC, air conditioning and fire protection systems. Suitable for various application scenarios, and can be widely applied in small-scale commercial and industrial enterprises, hospital buildings, residential energy storage, etc. Equipped with features such as peak shaving, self-consumption, dynamic scaling, and planned curve response.

#### Highly integrated

- All in one, factory prefabricated design;
- Flexible deployment, plug and play;
- Incorporating STS, it achieves seamless switching between on off grid.
- Incorporating DCDC, it enables PV integration, saving electricity costs.

#### Intelligent and friendly

- Programmable working mode, touch screen control;
- Intelligent switching strategies for different scenarios: peak shaving, self-consumption, dynamic scaling, planned curve response;
- Linkage of local and cloud monitoring, rapid digital diagnosis, and intelligent automatic inspection;

#### Safe and efficient

- High efficient neutral point clamped;
- No parallel circulation, reduce energy loss significantly;
- 3S collaboration,EMS closed-loop safety logic,make sure system security;

#### Grid friendly

- Equipped with active and reactive power quadrant regulation.
- Equipped with Low Voltage Ride Through (LVRT) and High Voltage Ride Through (HVRT).
- Equipped with precise switching between power, grid, and loading.



### Product parameters >>

| Model              | GSO50-100                                 | GSO80-165   | GSO105-200     | GSO105-225 | GSO125-245 |         |
|--------------------|---|---|----------------|------------|------------|---------|
| On grid parameter  | Rated power(kW)                           | 50  | 80             | 105        | 125        |         |
|                    | Maximum output power(kW)                  | 55  | 88             | 116        | 138        |         |
|                    | Rated grid voltage(V)                     | 400   |                |            |            |         |
|                    | Rated current(A)                          | 72  | 115            | 167        | 200        |         |
|                    | Allowable grid voltage(V)                 | ±15%  |                |            |            |         |
|                    | Rated grid frequency(Hz)                  | 50±5  |                |            |            |         |
|                    | Power Factor                              | 0.99  |                |            |            |         |
|                    | THDI                                      | < 3% (Rated power)  |                |            |            |         |
|                    | Overload capacity                         | 110% Long term  |                |            |            |         |
|                    | Access method                             | 3P4L  |                |            |            |         |
| Off grid parameter | Rated output voltage(V)                   | 400   |                |            |            |         |
|                    | Rated output power(kW)                    | 50  | 80             | 100        | 125        |         |
|                    | Rated grid frequency(Hz)                  | 50±5  |                |            |            |         |
|                    | THDU                                      | < 3% (Linear power)   |                |            |            |         |
|                    | Unbalanced load capacity                  | 100%  |                |            |            |         |
|                    | Overload capacity                         | 110% Long term  |                |            |            |         |
|                    | Charge and discharge conversion time (ms) | < 20  |                |            |            |         |
| Battery parameter  | Battery system configuration              | 1P216S  | 1P224S         | 1P224S     | 1P224S     | 1P238S  |
|                    | Cell Type                                 | 150Ah   | 230Ah          | 280Ah      | 314Ah      | 320Ah   |
|                    | Rated voltage(V)                          | 691.2   | 716.8          | 716.8      | 716.8      | 761.6   |
|                    | Operating voltage(V)                      | 650~767   | 650~796        | 650~796    | 650~796    | 690~845 |
|                    | Battery Capacity(kWh)                     | 108   | 170            | 215        | 230        | 255     |
| PV                 | PV voltage range                          | 500~620   | 500~620        | 500~620    | 500~620    | 500~660 |
|                    | Maximum input power(kW)                   | 50  |                | 100        |            |         |
|                    | Rated current on Low voltage side(A)      | 100   |                | 200        |            |         |
|                    | Maximum efficiency                        | ≥99%  |                |            |            |         |
| System efficiency  | Number of MPPT tracker                    | 1   |                | 2          |            |         |
|                    | PCS maximum efficiency                    | ≥98%  |                |            |            |         |
|                    | System maximum efficiency                 | > 90%   |                |            |            |         |
| Protection         | Battery charge and discharge rate         | ≤0.5C   |                |            |            |         |
|                    | Battery reverse connection protection     | Yes   |                |            |            |         |
|                    | DC overcurrent protection                 | Yes   |                |            |            |         |
|                    | AC overcurrent protection                 | Yes   |                |            |            |         |
|                    | AC overvoltage protection                 | Yes   |                |            |            |         |
|                    | Surge protection                          | Yes   |                |            |            |         |
|                    | Fire protection system                    | Non-stationary pressure perfluoroacetone  |                |            |            |         |
|                    | Grid support                              | L/HVRT, active and reactive power control   |                |            |            |         |
| General parameter  | Dimensions(D*W*H)mm                       | 1400*1400*2200  | 1400*1950*2200 |            |            |         |
|                    | Weight (t)                                | 2.5   | 3              | 3.3        | 3.7        | 4       |
|                    | Line entry method                         | Side entry  |                |            |            |         |
|                    | Ambient temperature(°C)                   | -20~50( De-rating power from 45°C)  |                |            |            |         |
|                    | Charging temperature(°C)                  | 0~55  |                |            |            |         |
|                    | Discharge temperature(°C)                 | -10~55  |                |            |            |         |
|                    | Ambient humidity(%RH)                     | <95%RH, non-condensing  |                |            |            |         |
|                    | Working altitude(m)                       | 5000 (De-rating power from 2000m)   |                |            |            |         |
|                    | Ingress Protection Rating                 | IP54(IP65 for key components)   |                |            |            |         |
|                    | Cooling method                            | Industrial air conditioning (battery compartment) / forced air cooling (electrical compartment) |                |            |            |         |
| Commu-nication     | Communication interface                   | CAN/RS485/Ethernet  |                |            |            |         |
|                    | Communication Protocol                    | RTU/MODBUS-TCP  |                |            |            |         |

Note: Actual product may vary. Supports US standard three-phase and split-phase systems (customizable). Specifications are subject to change without prior notice.

# GLC125-261/GLC250-514

## Liquid Cooling Outdoor Cabinet

### Performance characteristics >>

#### Longevity and cost reduction

- Balancing technology improves battery consistency and extends system lifespan.
- The temperature difference of the batteries in the PACK is less than 3°C, which effectively extends the battery life.
- The charge and discharge conversion efficiency is greater than 91%, and the system life is more than 6,000 times.
- Intelligent liquid cooling temperature control reduces auxiliary power consumption by 20%, saving operating costs.
- Pre-installed design for easy transportation, no battery installation work.

#### Safe and reliable

- AI monitoring of battery cell health and early warning of sick batteries.
- Closed liquid cooling system + cloud management, safer.
- Triple independent fire protection, space-level and PACK-level fire protection, 1.5H fire resistance for the whole cabinet.

#### Efficient and flexible

- ALL IN ONE design concept, high power, high energy density, and 20% less floor space.
- Intelligent cluster-level management reduces the cask effect of battery clusters and increases discharge capacity.
- Plug and play, Three-phase four-wire.

#### Lean Intelligence

- SOC high-precision status assessment can dynamically adjust energy efficiency management strategies. Intelligent cloud operation and maintenance, APP terminal, unattended operation.
- Multi-scenario function presets: substation management, industrial and commercial microgrids, oil engine replacement, etc.



### Product parameters >>

| Mode                           |                                   | GLC125-261  | GLC250-514     |
|--------------------------------|-----------------------------------|---|----------------|
| DC<br>Battery<br>Parameters    | Battery cell Type                 | LFP3.2V/314Ah   |                |
|                                | Battery Pack Configuration        | 1P52S/52.249kWh   | 1P64S/64.31kWh |
|                                | Battery System Configuration      | 1P260S  | 1P256S*2       |
|                                | Battery Voltage Range             | 728~923   | 716.8~908.8    |
|                                | Battery System Capacity           | 261.24  | 514.45         |
|                                | Temperature Detection             | Battery cell + copper busbar  |                |
|                                | Battery Charging/Discharging Rate | ≤0.5P   |                |
| AC<br>Parameters<br>(On grid)  | Rated Power                       | 125   | 250            |
|                                | Maximum Output Power              | 135   | 270            |
|                                | Rated Grid Voltage                | AC380V-15%~+10%   |                |
|                                | Rated Grid Frequency              | 50/60, ±5   |                |
|                                | Power Factor                      | -1 (leading) ~ 1 (lagging)  |                |
|                                | AC Current Harmonics (THDi)       | <3% (rated output power)  |                |
|                                | Connect Method                    | Three-phase, four-wire  |                |
| AC<br>Parameters<br>(Off grid) | Rated Output Voltage              | 380V±3%AC   |                |
|                                | Rated Output Power                | 125   | 250            |
|                                | Rated Output Frequency            | 50/60Hz   |                |
|                                | AC Voltage Harmonics (THDu)       | <3% (linear load)   |                |
| System<br>Parameters           | Overload Capacity                 | 1.1 times rated load (45°C), 1.2 times for 1 min, 1.3 times for 1 s |                |
|                                | Highest System Efficiency         | 91%   |                |
| Protection                     | DC Input                          | Load switch + fuse  |                |
|                                | Overvoltage Protection            | DC Type II/AC Type II   |                |
|                                | Fire Protection System            | PACK-level fire protection, full cabinet fire protection            |                |
| Incoming Line Method           |                                   | AC power input from bottom  |                |
| Environment<br>Requirements    | Allowable Ambient Temperature     | -30~+55 (derating at 45)  |                |
|                                | Allowable Ambient Humidity        | 0~95%RH   |                |
|                                | Maximum Working Altitude          | 3000 (derating above 2000)  |                |
|                                | Protection Level                  | IP54  |                |
|                                | Corrosion Resistance Grade        | C3  |                |
|                                | Cooling Method                    | Liquid cooling  |                |
|                                | Weight                            | 2.3   | 6              |
| Dimension(W*D*H) mm            |                                   | 982*1380*2657   | 1360*2380*2394 |

Note: The actual product shall prevail. Parameters are subject to modification without prior notice.

# Energy Storage System

## Containerized



### Product Introduction >>

The containerized energy storage system includes: BESS, bidirectional power conversion system (PCS), DC conversion system (PDS), microgrid switching system (STS), energy management system (EMS), auxiliary power distribution system, air conditioning system, and fire protection.

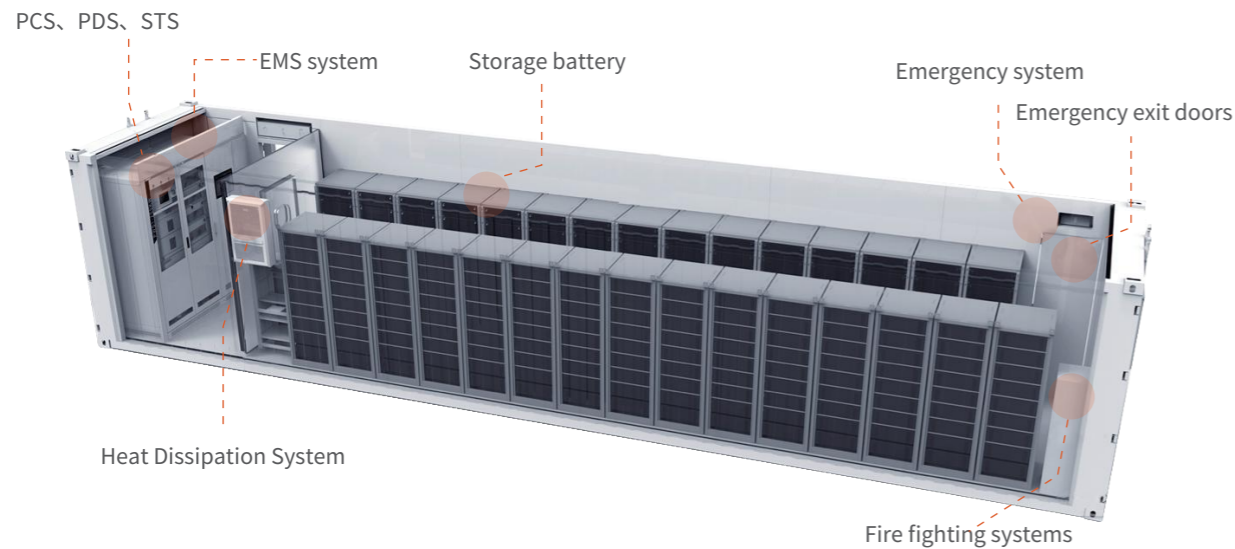
### Performance advantage >>

- According to customer needs, the type and capacity of the battery system can be flexibly configured
- PCS adopts modular, power frequency overall architecture, simple maintenance, flexible configuration, and can realize multiple parallel machines
- Supports on-grid and off-grid operation mode, seamless switching, and supports black start
- EMS unattended system, local control, cloud monitoring operation, with highly customizable functions
- With peak shaving and valley filling, demand response, anti-reverse flow operation, backup power supply, command response and other modes
- With a complete gas fire extinguishing system and automatic fire monitoring and alarm system, sound and light alarm and fault transmission
- With a complete heat dissipation and temperature control system to ensure that the temperature of the battery compartment is within the optimal working range
- The access control system has remote control and on-site operation functions

### Product parameters >>

| Model                      | 10ft                           | 20ft                 | 40ft                  |
|----------------------------|--------------------------------|----------------------|-----------------------|
| Output Voltage (V)         | 380/400±15%                    |                      |                       |
| Grid Frequency (Hz)        | 50/60(±2.5)                    |                      |                       |
| Output Power (kW)          | 50~100                         | 50~500               | 250~630               |
| Battery Capacity(kWh)      | 50~400                         | 200~1500             | 800~3000              |
| Battery Type               | Lithium Iron Phosphate Battery |                      |                       |
| Dimensions(D*W*H)mm        | Inner:2831*2352*2385           | Inner:2352*5898*2385 | Inner:2352*12032*2385 |
|                            | Outer:2438*2991*2591           | Outer:2438*6058*2591 | Outer:2438*12192*2591 |
| Protection Level           | IP54                           |                      |                       |
| Humidity Range (%RH)       | 0~95                           |                      |                       |
| Altitude (m)               | 3000                           |                      |                       |
| Operating Temperature (°C) | -20~50                         |                      |                       |
| Battery Voltage Range (V)  | 250~850                        |                      |                       |
| Maximum DC Current (A)     | 200                            | 750                  | 1500                  |
| Connection Method          | 3P4W                           |                      |                       |
| Power Factor               | -1~1                           |                      |                       |
| Communication Method       | RS485,CAN,Ethernet             |                      |                       |
| Isolation Method           | Power Frequency Isolation      |                      |                       |

Note: The above data are subject to change without prior notice.



## Battery Combiner Box Regular Version



### Product Introduction >>

This product is used with low-voltage lithium iron phosphate battery pack. It is compact and easy to install. It can effectively solve the problem of inconsistent battery pack capacity when multiple low-voltage battery packs are running in parallel. It is widely used in small-scale industrial and commercial and household energy storage.

### Performance advantage >>



Indoor installation



Use multiple batteries in parallel



Easy and quick installation

### Product parameter >>

| Model                         | GSBD3-8-250A | GSBD3-10-500A | GSBD4-12-800A | GSBD6-20-1250A |
|-------------------------------|--------------|---------------|---------------|----------------|
| Number of connected batteries | 3~8          | 3~10          | 4~12          | 6~20           |
| Maximum allowable current (A) | 250          | 500           | 800           | 1250           |
| Working temperature(°C)       | -10~55       |               |               |                |
| Chassis size (D*W*H)mm        | 410*310*180  |               | 500*600*250   |                |
| Weight(kg)                    | 12~26        |               |               |                |

Note: The above data is for reference only and is subject to change without prior notice.

## Battery Combiner Box Customized Version



### Product Introduction >>

This product is used with low-voltage lithium iron phosphate battery pack. It is compact, easy and quick to install, and has over-current and over-voltage protection measures, making the system operation more efficient and safer. At the same time, it effectively solves the problem of inconsistent battery pack capacity when multiple low-voltage battery packs are running in parallel. It is widely used in small-scale industrial and commercial and household energy storage.

### Performance advantage >>



Use multiple batteries in parallel



Easy and quick installation



Overcurrent and overvoltage protection

### Product parameter >>

| Model                         | GSBC2-5-100A | GSBC3-8-300A | GSBC6-10-500A | GSBC11-16-500A |
|-------------------------------|--------------|--------------|---------------|----------------|
| Number of connected batteries | 2~5          | 3~8          | 6~10          | 10~16          |
| Maximum allowable current (A) | 100          | 300          | 500           | 500            |
| Withstand voltage(VDC)        | 250          | 500          |               |                |
| Overcurrent protection        | Yes          |              |               |                |
| Working temperature(°C)       | -10~55       |              |               |                |
| Chassis size (D*W*H)mm        | 500*600*250  |              |               | 500*700*220    |
| Weight (kg)                   | 18~20        |              |               |                |

Note: The above data is for reference only and is subject to change without prior notice.